VERSION WITH MARKINGS TO SHOW CHANGES MADE

Kindly cancel claim 1, without prejudice.

Please add new claims 8-26, as shown below:

8. (NEW) A chuck device, comprising:

a first base member;

a second base member on said first base member;

first means in said first base member for receiving and increasing a rotational force;

second means in said first base member for receiving said rotational force from said first means and for increasing said rotational force into an increased rotational force;

said second means for receiving including means for redirecting said increased rotational force perpendicular to said first means for receiving and increasing;

means for converting said increased rotational force from said second means into an increased axial force perpendicular to said first and said second means; and

said means for converting being operable between said first and said second base member, whereby said rotational force is transferred through said first base member to said second base member and converted into an increased axial force operable relative to said second base member.

9. (NEW) A chuck device, according to claim 8, further comprising:

means for chucking an external item in said second base member; and

said means for chucking receiving said increased axial force and securely chucking said external item to said second base member, whereby said external item is easily secured with a holding force magnified from said rotational force.

10. (NEW) A chuck device, according to claim 9, further comprising:

at least a first conversion member in said means for converting;

said second means for receiving including means for driving said first conversion member away from said first means for receiving and increasing;

at least a first sloped engagement groove on said first conversion member;

at least a first claw member in said means for chucking;

at least a first engagement section on said first claw member;

said first sloped engagement groove being sloped relative to a first direction of motion of said first claw member relative to said second base

member;

said means for chucking including means for operating said at least first claw member axially along an axial direction of said second base member; and

said first sloped engagement groove engaging said first engagement section being effective to retain said first engagement section and to drive said first engagement section in said first direction of motion and fix said external item to said second base member, whereby said external item is secured to said chuck device.

11. (NEW) A chuck device, according to claim 10, further comprising:

at least a first worm gear in said first means for receiving and increasing;

at least a second worm wheel in said second means for receiving and for further increasing said rotational force operable about a first diameter;

said first worm gear having a first rotational axis and a second diameter;

said second diameter greater than said first diameter;

said second worm wheel having a second rotation axis;

said first rotational axis being perpendicular to said second rotational axis; and

said first worm gear threadably engaging said second worm wheel and being effective to magnifying said rotational force.

12. (NEW) A chuck device, according to claim 11, further comprising:

a first operational axis on said means for converting;

said first operation axis being parallel said second rotational axis;

said first operational axis being perpendicular to said an axial direction of motion of said first claw member;

said first operational axis being perpendicular to said first rotational axis;

said first sloped engagement groove being sloped relative to said first operation axis; and

said means for converting including means for receiving said increased rotational force and operating along said second rotational axis, whereby said first claw member operates simultaneously in said first direction of motion relative to said second base member and along said first sloped engagement groove relative to said first conversion member.

13. (NEW) A chuck device, according to claim 12, further comprising:

at least a first engagement groove in said second base member;

at least a first leg on first claw member;

said first leg in said first engagement groove; and

said first engagement groove including means for engaging said first leg

and operate said first claw member axially along said first direction of motion.

14. (NEW) A chuck device, according to claim 13, wherein:

said first sloped engagement groove has a slope of from about 4 to about 80 degrees relative to a direction of motion of said first claw member.

15. (NEW) A chuck device according to claim 14, wherein said slope is from about 65 to about 75 degrees.

16. (NEW) A chuck device, according to claim 13, wherein:

said first base member includes at least a first hole and a second hole;

said first worm gear is disposed in said first hole;

said second worm wheel is disposed in said second hole;

at least a first cover;

said first cover being fitted on at least a first face of said first base member;

said at least first cover including means for operably retaining said first worm gear in said first hole and allowing external input of said rotational force;

at least a second cover;

said second cover being fitted on a second face of said first base member opposite said first face perpendicular to said second face; and

said at least second cover including means for operably retaining said second worm wheel in said second hole and allowing operation of said conversion member relative to said worm wheel.

17. (NEW) A chuck device, according to claim 16, further comprising:

at least a first grease access in said at least first claw member;

said first grease access being parallel said first direction of motion; and

said first grease access being operable along a first face of said first sloped engagement groove, whereby an external lubricant is easily applied between said conversion member and said first engagement section effective to allow smooth operation of said chuck device.

18. (NEW) A chuck device, according to claim 17, further comprising:

a second sloped engagement groove on said first conversion member;

a second claw member in said means for chucking;

at least a second engagement section on said second claw member;

said second sloped engagement groove being sloped relative to a second direction of motion of said second claw member relative to said second base member;

said means for chucking including means for operating said second claw member axially along said axial direction of said second base member; and

said second sloped engagement groove engaging said second engagement section to retain said second engagement section and drive said second engagement section along said second direction of motion and fix said external item to said second base member, whereby said external item is secured to said chuck device.

19. (NEW) A chuck device, comprising:

a first base member;

a second base member on said first base member;

first means in said first base member for receiving and increasing a rotational force;

second means in said first base member for receiving said rotational force from said first means and for further increasing said rotational force into an increased rotational force;

said second means for receiving including means for redirecting said increased rotational force perpendicular to said first means for receiving and increasing;

means for converting said increased rotational force from said second means into an increased axial force perpendicular said first and said second means;

said means for converting being operable between said first and said second base member, whereby said rotational force is transferred through said first base member and into said second base member and converted into an increased axial force operable relative to said second base member;

means for chucking an external item in said second base member;

said means for chucking receiving said increased axial force and securely chucking said external item to said second base member, whereby said external item is easily secured with a holding force magnified from said rotational force;

at least a first conversion member in said means for converting;

said second means for receiving including means for driving said first conversion member away from said first means for receiving and increasing;

at least a first sloped engagement groove on said first conversion member;

at least a first claw member in said means for chucking;

at least a first engagement section on said first claw member;

said first sloped engagement groove being sloped relative to a first direction of motion of said first claw member relative to said second base member;

said means for chucking including means for operating said at least first

claw member axially along an axial direction of said second base member; and

said first sloped engagement groove engaging said first engagement section thereby to retain said first engagement section and to drive said first engagement section in said first direction of motion and fix said external item to said second base member, whereby said external item is secured to said chuck device.

20. (NEW) A chuck device, comprising:

first means for receiving and increasing a rotational force;

second means for receiving and increasing said rotational force from said first means and outputting an increased rotational force;

said second means for receiving redirecting and rotational force from a first base member to a second base member;

means for receiving and converting said increased rotational force from said second means into an increased axial force;

means for chucking an external item to said second base member; and

said means for chucking receiving said increased axial force and securing said external item to said second base member and said chuck device.

21. (NEW) A chuck device, according to claim 20, further comprising:

at least a first conversion member in said means for receiving and converting;

at least a first sloped engagement groove on said first conversion member;

at least a first claw member in said means for chucking;

at least a first engagement section on said first claw member;

said first sloped engagement groove being sloped relative to a direction of motion of said first claw member;

said means for chucking including means for operating said at least first claw member axially along an axial direction of said second base member; and

said first sloped engagement groove engaging said first engagement section thereby to drive said first engagement section in said direction of motion and fix said work item in said second base member, whereby said work item is secured in said chuck device.

22. (NEW) A chuck device, according to claim 21, further comprising:

at least a first worm gear in said first means for receiving and increasing;

at least a second worm wheel in said second means for receiving and increasing;

said first worm gear having a first rotational axis;

said second worm wheel having a second rotation axis;

said first rotational axis being perpendicular to said second rotational axis; and

said first worm gear threadably engaging said second worm and magnifying said rotational force.

23. (NEW) A chuck device comprising:

a first base member;

at least a first claw member movably mounted on said first base member, for chucking an external item by moving said first claw member;

a first input member for receiving and applying a rotational force;

a first gear mechanism including means for receiving and increasing said rotational force;

a second gear mechanism including means for receiving said rotational force from said first gear mechanism, increasing said rotational force, and operating a screw shaft member along an axial direction perpendicular to said first input member; and

a conversion mechanism for receiving said rotational force;

said conversion mechanism including means for resisting rotation relative to said first input member, and for converting said rotational force into an axial force to drive said at least first claw member in an axial direction relative said first base member, whereby said chuck device securely engages said external item.

24. (NEW) A chuck device, according to claim 23, further comprising:

a worm gear in said first gear mechanism;

a worm wheel in said second gear mechanism;

said worm gear rotating integrally with said input member;

said worm gear threadably engaging said worm wheel;

a second gear mechanism including a threaded hole concentric with a center of said worm wheel; and

a screw shaft member threadably engaging said threaded hole.

25. (NEW) A chuck device, according to claim 24, wherein:

said conversion mechanism includes a conversion member;

said conversion member being secured to said screw shaft member;

at least a first sloped engagement groove on said conversion member;

said first sloped engagement groove being sloped relative to a direction of motion of said first claw member;

at least a first engagement section on said first claw member; and

said first engagement section slidably engaging said first sloped engagement groove and preventing said conversion member from rotating relative

to said worm wheel.

26. (NEW) A chuck device, according to claim 25, further comprising:

at least a second claw member;

said first and said second claw members being disposed facing each other on said base member;

a first leg on said first claw member;

a second leg on said second claw member;

said first and said second legs slidably engaging a shared engagement groove on said base member effective to axially align said first and said second claw members;

at least a second sloped engagement groove on said conversion member;

said second sloped engagement groove sloped relative to a direction of motion of said second claw member;

at least a second engagement section on said second claw member;

said second engagement section slidably engaging said second sloped engagement groove and preventing said conversion member from rotating relative to said worm wheel; and

said conversion mechanism effective to slidably engage and move said first and said second claw member symmetrically along said shared engagement groove.